REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested.

Claims 1-8, 13-16, 26-30, 34-37 and 41 stand rejected under 35 USC 102 as allegedly being unpatentable over Bertelsen et al. In response, Claim 1 has been amended to recite that the signal that is stored is representative of detection over a specified period of time, and also to include the subject matter of Claim 2. Bertelsen et al. does not in any way teach or suggest this subject matter.

Bertelsen et al. does teach a system which uses attenuation correction, and as part of that correction, the system ensures that multiple different receptors receive a signal prior to producing an output. For example, the sections cited by the rejection, column 1 beginning at line 49, refers to a detector pair 80 and 80', and column 7 line 60 explains that when an event is detected, a coincidence timing circuit 1050 produces an output. The rejection also alleges that column 11 line 42 specifies numbers of event detection. However, this also refers to trigger signals that are "over the threshold voltage" and teaches nothing about a multiplicity of events within the signal.

In fact, nowhere does Bertelsen et al. teach anything about storing a signal that is over a specified length of time, and reviewing that signal for a number of events within the signal of the specified length of time. All the analysis in Bertelsen et al. is entirely instantaneous. Therefore, amended Claim 1 is completely allowable over Bertelsen et al. Bertelsen et al. does not teach analysis of a signal stored over a specified length of time. Therefore, Claim 1 is patentable over Bertelsen et al.

Claim 26 has been amended in an analogous way, and should be allowable for analogous reasons. Claim 35 has also been amended in an analogous way. Bertelsen et al. does not teach or suggest a buffer for storing a predetermined length of signal and analyzing that length of signal.

Claim 41 specifically defines using the dose and number of gamma ray signals to form a filter that filters out portions of the received gamma ray signals that are outside a range that is based on the number and dose.

The rejection attempts to read this on element 42, however element 42 teaches nothing about a filter that is formed based on the dose of the gamma rays. Therefore, Claim 41 should be additionally allowable.

Claims 17-23 are canceled to obviate the rejection thereto.

The rejection of many of the dependent claims should be overcome by virtue of the amendments made and discussed above.

Certain claims, including Claims 10-12, Claims 24-25, Claims 31-33, and Claims 38-40 should each be allowable on their own merits. Each of these claims is specific to the criterion that is used for the filter.

For example, Claim 10 defines that the comparing comprises comparing the signal to a criterion that represents vibrational energy. This vibrational energy criterion is then used to form the filter that decides whether or not to reject the signal.

This claim, along with Claims 11 and 12, were rejected over Bertelsen et al. in view of Mitchell et al. However, Mitchell et al. teaches nothing about forming a filter to reject a signal in this way. Admittedly, Mitchell et al. does teach a Raman spectroscopy system, and describes how quantization can be used to analyze the material being analyzed. The vibrational energy mode of the signal being analyzed teaches nothing about detection of background noise/vibration, and forming a filter to eliminate that background noise. The rejection refers to column 3 lines 34-54 of Mitchell et al. and column 8 lines 56-65. The cited section in column 3 simply describes calibrating the spectrometer, while column 8 describes how vibrational energy of a gas sample is quantized and can be used to identify the gas sample. This teaches nothing about the claimed subject matter

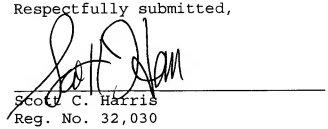
of forming a filter that rejects vibrational energy. Similarly, Claim 11 defines comparing the signal to a criterion that represents a cosmic ray. The rejection identifies column 9 lines 41-47. This cited section simply refers to dark noise which is removed by zero calibration. There is no teaching or suggestion, however, of comparing a signal that is obtained over a specified time to a criterion that represents a cosmic ray.

The other claims of this type, including Claims 24-25 and 31-33 and 38-40 should be analogously allowable for similar reasons.

It is believed that all of the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue or comment, does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicants ask that all claims be allowed. Please apply the $100 extra claim fee, and any other applicable charges or credits, to Deposit Account No. 06-1050.

Respectfully submitted,



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